

**KNOWLEDGE AND COMPLIANCE WITH ANTIRETROVIRAL THERAPY
AMONG REPRODUCTIVE AGED WOMEN IN EKITI STATE**

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Abstract

Adhering strictly to antiretroviral medication is necessary to achieve the greatest possible decrease in HIV/AIDS symptoms. Despite the efficacy of these treatments, noncompliance difficulties have hindered the ability of several individuals living with HIV to get benefits from antiretroviral therapy. This study aimed to assess the compliance with antiretroviral therapy (ART) among reproductive-aged women in Ekiti State, Nigeria. The specific objectives included determining the proportion of compliant women at two teaching hospitals, evaluating the level of compliance, and assessing their knowledge of ARV therapy. A descriptive, cross-sectional survey design, was employed to conduct the research among HIV-positive women attending ART clinics in Ekiti State University Teaching Hospital, Ado-Ekiti and Federal Teaching Hospital, Ido-Ekiti. The study utilized a total enumeration sampling to recruit 119 consenting respondents, using a self-administered, validated questionnaire and checklist for data collection. The validity and reliability of the instruments were determined through expert review and test-retest methods respectively. Ethical approval was obtained from relevant committees and participants. Data was analyzed using descriptive and inferential statistics. Result revealed that 42% of respondents demonstrated average compliance, while 58% exhibited high compliance. 32% had average knowledge, and 68% had high knowledge. There was a significant positive relationship between knowledge and compliance with ARV therapy ($r = .503$, $p = .000$). It was recommended among others that health authorities and community organizations should implement programs to strengthen social support networks for individuals on ARV therapy, including family and community-based support initiatives.

Keywords: Knowledge, Compliance, ARV Therapy, Reproductive Aged Women

Introduction

Human Immune-deficiency Virus (HIV) is the pathogen responsible for causing Acquired Immune Deficiency Syndrome (AIDS). HIV's gravity and magnitude have positioned it as a critical concern for the worldwide public health community (Case et al., 2019). The disease

has significant economic implications since it changes the demographic makeup of a population and places a weight of illness and death on society, particularly impacting those who actively contribute to the economy through their productive work. Despite the extensive efforts made by nations worldwide to educate and protect those living with HIV/AIDS and prevent the illness from spreading, millions of people continue to die from HIV/AIDS and new cases of infection are still being recorded (Hemelaar et al., 2019).

HIV/AIDS continues to be a persistent public health issue. The World Health Organization suggested employing antiretroviral medication (ART) to inhibit the progression of HIV/AIDS and avert the transfer of HIV from mother to child (MTCT). Adhering strictly to antiretroviral medication is necessary to achieve the greatest possible decrease in HIV/AIDS symptoms, guarantee the presence of adequate levels of antiretroviral agents required to inhibit HIV replication, and decrease the amount of virus in the bloodstream. Despite the efficacy of these treatments, noncompliance difficulties have hindered the ability of several individuals living with HIV to get benefits from antiretroviral therapy (ART), since 50% fail to adhere to their recommended medication regimen (Ndashimye & Arts, 2022). Presently, there are around 35.9 million individuals globally who are afflicted with HIV/AIDS, with 23.5 million of them residing in sub-Saharan Africa. Nigeria now has an HIV prevalence rate of 4.1%, with around 3.2 million individuals infected with the virus. It is anticipated that 1.6 million of these individuals are eligible for Anti-retroviral medications. Annually, over 1.4 million women infected with HIV worldwide give birth, with 91% of them living in sub-Saharan Africa. Utilising antiretroviral medication (ART) throughout and post pregnancy aids in maintaining the well-being of the mother and inhibiting the transfer of HIV from mother to child.

The widespread availability and use of antiretroviral therapy (ART) during pregnancy has significantly contributed to a substantial decrease in the transmission of HIV from mother to child on a worldwide scale.

Antiretroviral therapy (ART) has been a cornerstone in managing HIV/AIDS, yet challenges in compliance persist (Philips, 2020). Factors influencing compliance range from individual to systemic, including patient-related variables, economic constraints, and healthcare infrastructure (Ndashimye & Arts, 2022). Cultural norms, accessibility to healthcare services, and economic status all play a role in determining adherence to treatment protocols (Ngandu et al., 2021). The ramifications of non-compliance are grave, leading to increased healthcare costs, drug resistance, and poorer health outcomes (Philips, 2020). Understanding and

addressing these multifaceted barriers are essential in ensuring effective management and prevention strategies for HIV/AIDS transmission, particularly in vulnerable populations (Gourlay et al., 2018). Therefore, comprehensive research into the social, cultural, and economic factors influencing compliance with ART among reproductive-aged women is crucial in developing targeted interventions to curb HIV/AIDS transmission (Madeddu et al., 2018). This study seeks to investigate the knowledge and compliance with ARV therapy among reproductive aged women in Ekiti State.

Specifically, the study;

1. determined the proportion of reproductive aged women who are compliant with ARV therapy in the two teaching hospitals in Ekiti State;
2. determined the level of compliance with ARV therapy among reproductive aged women;
3. assessed the level of knowledge of ARV therapy among reproductive aged women.

One research hypothesis was raised;

Ho1: There is no significant relationship between the level of knowledge and compliance with ARV therapy among reproductive aged women

Methodology

The study utilised a descriptive design. The survey design aims to analyse the existing features of events linked to antiretroviral (ARV) therapy among HIV-positive reproductive women attending ART clinics in two teaching hospitals in Ekiti State, Nigeria, using an inductive approach. The research was carried out in Ekiti State University Teaching Hospital, Ado-Ekiti and Federal Teaching Hospital, Ido-Ekiti. The population consisted of HIV positive women of reproductive age who are receiving treatment at ART clinics in two teaching hospitals in Ekiti State. Over the last three months, there were a total of 131 reproductive women who tested positive for HIV and attended ART clinics at two teaching hospitals in Ekiti State. During each clinic day, an average of two newly diagnosed HIV positive reproductive women visit for scheduling. Only the reproductive women who booked for and attend ART clinics in in three teaching hospitals in Ekiti State during the period of study and are HIV positive while those who are HIV positive but do not consent are excluded from the study.

Total enumeration was used to select purposefully all the consented respondents in the study settings. The instruments for data collection were adapted and validated questionnaire and a checklist. The validated questionnaire was divided into six sections (sections A-C). The first

section (A) sought for the demographic data of the participants which included the marital status, age group, highest educational level, religion, occupation, level of income and location of residence. Sections B measured compliance to ARV therapy. This section consists of 10 items with Yes or No option. Poor compliance score ranged from 10-13, average compliance will ranged 14-16 while high compliance ranged from 17-20. Section C measured knowledge of ARV therapy. This section consisted of 10 questions on the knowledge of ARV therapy with options of Yes or No. Poor knowledge score ranged from 1 to 3, average knowledge score ranged from 4-6, while high knowledge score ranged from 7 to 10. The checklist determined the proportion of reproductive aged women who are compliant with ARV therapy. It looked into the attendance of reproductive aged women in HIV clinic among others.

The questionnaire was submitted to experts in test and measurement to ensure face and content validity. Test-retest method was used to ensure the reliability coefficient of 0.815. Ethical approval was obtained from Afe Babalola University Research and Ethical Committee. The researcher single-handedly gathered the data for this study, eliminating the requirement for research assistance in order to maintain respondent confidentiality. The consent and cooperation of the nurse in charge was ensured to obtain consent from reproductive women with HIV at the ART clinic at two tertiary hospitals in Ekiti State, Nigeria. In addition, after gathering the patients' medical history from the nurses in the clinics, questionnaires were given to the participants. The data obtained from the surveys were analysed using quantitative methods, namely descriptive and inferential statistics. The descriptive statistics encompassed frequency and percentage analysis to examine the demographic features and variables of interest in this study, which aimed to address the research objectives of the study. Furthermore, the factors linked to compliance to antiretroviral (ARV) medication were examined using the Pearson Product Moment correlation. A decision was reached at a significance level of 0.05. The research questions were addressed through the use of frequency count, simple percentage, and mean. Meanwhile, hypothesis 1 was analysed utilising Pearson product moment correlation.

Results

It should be noted that One hundred and nineteen (119) respondents were estimated and participated in this study out of the 131 who attended ART clinics representing 90.8% retrieval success rate

Table 1: Distribution of respondents by socio-demographic characteristics N=119

Socio-demographic characteristics	Frequency (N= 119)	Percentage
Age		
Below 20 years	10	8.4
21-30 years	45	37.8
31-40 years	36	30.3
41-50 years	22	18.5
Above 50 years	6	5.0
Religion		
Christianity	79	66.4
Islam	26	21.8
Jehovah Witness	2	1.7
Traditional	4	3.4
Others	8	6.7
Marital Status		
Not Married	24	20.2
Married	56	47.1
Divorced	23	19.3
Separated	16	13.4
Highest level of education		
No Formal Education	6	5.0
Primary	21	17.6
Secondary	50	42.0
Tertiary	36	30.3
Others	6	5.0
Occupation		
No Job	16	13.4
Civil servants	22	18.5
Private Organisation	31	26.1
Students	30	25.2
Artisan/Entrepreneur	15	12.6
Others	5	4.2
Total	119	100.0

The study surveyed 119 respondents to understand their socio-demographic characteristics. The age distribution showed that the largest group of respondents, 45 individuals (37.8%), were between 21 and 30 years old. This was followed by 36 respondents (30.3%) aged 31 to 40 years. Those aged 41 to 50 years comprised 22 respondents (18.5%), while 10 respondents (8.4%) were below 20 years, and 6 respondents (5.0%) were above 50 years. In terms of religious affiliation, the majority of the respondents, 79 individuals (66.4%), identified as Christians. This was followed by 26 respondents (21.8%) who practiced Islam. Other religions

included Jehovah's Witnesses with 2 respondents (1.7%), traditional religions with 4 respondents (3.4%), and other unspecified religions with 8 respondents (6.7%).

Regarding marital status, nearly half of the respondents, 56 individuals (47.1%), were married. Those who were not married comprised 24 respondents (20.2%), while 23 respondents (19.3%) were divorced, and 16 respondents (13.4%) were separated. Educational attainment varied among the respondents, with the largest group, 50 individuals (42.0%), having completed secondary education. This was followed by 36 respondents (30.3%) with tertiary education, 21 respondents (17.6%) with primary education, and 6 respondents (5.0%) with no formal education. Another 6 respondents (5.0%) reported having other forms of education.

Occupationally, 31 respondents (26.1%) worked in private organizations, making it the most common occupation among the respondents. Students constituted 30 respondents (25.2%), while 22 respondents (18.5%) were civil servants. There were 16 respondents (13.4%) without jobs, 15 respondents (12.6%) who were artisans or entrepreneurs, and 5 respondents (4.2%) who reported other occupations. The survey provided a comprehensive overview of the socio-demographic characteristics of the respondents, highlighting a predominantly young, Christian, and married population with a significant proportion having secondary education and working in private organizations.

Table 2: Record of reproductive aged women who are compliant with ARV therapy

Teaching Hospital	Reproductive aged women on Register	Reproductive aged women who visit clinic	Percentage Rate
Hospital A	98	63	64.29
Hospital B	96	68	70.83
Total	194	131	67.53

Table 2 provides a summary of compliance rates for ARV therapy among reproductive-aged women at two teaching hospitals. In Hospital A, a total of 98 reproductive-aged women are registered for ARV therapy. Out of these, 63 women visit the clinic regularly, resulting in a compliance rate of 64.29%. This indicates that just over sixty-four percent of the women in Hospital A adhere to their therapy schedule by attending their clinic appointments. In Hospital B, the compliance rate is slightly higher. Out of 96 registered reproductive-aged women, 68 visit the clinic, yielding a compliance rate of 70.83%. This suggests that over seventy percent

of the women in Hospital B are compliant with their ARV therapy by maintaining regular clinic visits.

Table 3: Compliance with ARV therapy among Respondents N= 119

S/N	ITEMS	Yes (%)	No (%)	Mean	S.D.
1.	Do you take your ARV medication at the same time every day?	76 (63.9)	43 (36.1)	1.64	0.48
2.	Have you missed taking your ARV medication in the past week?	79 (66.4)	40 (33.6)	1.66	0.47
3.	Do you attend your scheduled medical appointments regularly?	89 (74.8)	30 (25.2)	1.75	0.44
4.	Do you follow the dietary recommendations given by your healthcare provider while on ARV therapy?	80 (67.2)	39 (32.8)	1.67	0.47
5.	Have you experienced any side effects from ARV therapy that made you stop taking your medication?	71 (59.7)	48 (40.3)	1.60	0.49
6.	Do you receive support from family or friends in managing your ARV therapy?	80 (67.2)	39 (32.8)	1.67	0.47
7.	Are you able to obtain your ARV medication without financial difficulties?	81 (68.1)	38 (31.9)	1.68	0.47
8.	Do you believe that ARV therapy is effective in managing your condition?	70 (58.8)	49 (41.2)	1.59	0.49
9.	Have you discussed any issues or concerns about your ARV therapy with your healthcare provider?	77 (64.7)	42 (35.3)	1.65	0.48
10.	Do you feel knowledgeable about the importance of adhering to your ARV therapy?	70 (58.8)	49 (41.2)	1.59	0.49

Table 3 revealed that the survey of 119 respondents revealed varying levels of compliance with antiretroviral (ARV) therapy. A majority, 76 respondents (63.9%), reported taking their ARV medication at the same time every day, though 43 respondents (36.1%) did not. Additionally, 79 respondents (66.4%) did not miss any medication in the past week, while 40 respondents (33.6%) did. Regular attendance at scheduled medical appointments was high, with 89 respondents (74.8%) affirming this behavior. Compliance with dietary recommendations was reported by 80 respondents (67.2%), and 71 respondents (59.7%) noted experiencing side effects that influenced their medication adherence. Family or friend support was received by 80 respondents (67.2%), and 81 respondents (68.1%) were able to obtain medication without financial difficulty. Belief in the effectiveness of ARV therapy was held

by 70 respondents (58.8%), while 77 respondents (64.7%) discussed concerns with their healthcare provider. Lastly, 70 respondents (58.8%) felt knowledgeable about the importance of adherence to their therapy. The mean compliance scores across the items ranged from 1.59 to 1.75, indicating a general trend towards positive adherence behaviors, though there is room for improvement in several areas. To summarize the level of compliance with ARV therapy among reproductive aged women attending clinics in selected teaching hospitals in Ekiti State, the SOLO classification was used.

Table 4: Summary of level of compliance with ARV therapy

Level	Frequency	Percent
Poor Compliance (10 – 13)	0	0.0
Average Compliance (14 - 16)	50	42.0
High Compliance (17 – 20)	69	58.0
Total	119	100.0

Table 4 summarizes the levels of compliance with antiretroviral (ARV) therapy among 119 respondents. None of the respondents fell into the poor compliance category (scoring 10-13), indicating that every participant had at least an average level of adherence to their therapy. Fifty respondents (42.0%) demonstrated average compliance, with scores ranging from 14 to 16. The majority, 69 respondents (58.0%), exhibited high compliance, scoring between 17 and 20. This distribution shows a generally positive adherence to ARV therapy among the surveyed population, with a significant proportion achieving high compliance.

Table 5: Knowledge of ARV therapy among Respondents N= 119

S/N	ITEMS	Correct (%)	Wrong (%)	Mean	S.D.
1.	Can ARV therapy cure HIV completely?	88 (73.9)	31 (26.1)	0.74	0.44
2.	Is it necessary to take ARV medications even if you feel healthy?	79 (66.4)	40 (33.6)	0.66	0.47
3.	Does skipping doses of ARV medication increase the risk of drug resistance?	77 (64.7)	42 (35.3)	0.65	0.48
4.	Can ARV therapy reduce the risk of transmitting HIV to others?	87 (73.1)	32 (26.9)	0.73	0.45
5.	Is it safe to share ARV medications with someone else who is HIV positive?	93 (78.2)	26 (21.8)	0.78	0.41
6.	Are there specific times of the day when ARV medications should be taken?	84 (70.6)	35 (29.4)	0.71	0.46
7.	Can ARV therapy be stopped once your viral load becomes undetectable?	89 (25.2)	30 (25.2)	0.75	0.44

8.	Is it important to inform your healthcare provider about any other medications you are taking while on ARV therapy?	97 (81.5)	22 (18.5)	0.82	0.39
9.	Can missing several doses of ARV medication lead to treatment failure?	84 (70.6)	35 (29.4)	0.71	0.46
10.	Is it necessary to follow a special diet while on ARV therapy?	90 (75.6)	29 (24.4)	0.76	0.43

Table 5 presents the knowledge of ARV therapy among 119 respondents, highlighting a generally good understanding of various aspects of the treatment. The majority correctly answered that ARV therapy cannot cure HIV completely (73.9%), it is necessary to take ARV medications even when feeling healthy (66.4%), and skipping doses increases the risk of drug resistance (64.7%). Additionally, 73.1% knew that ARV therapy can reduce the risk of HIV transmission, and 78.2% correctly responded that sharing ARV medications is unsafe. Most respondents (70.6%) were aware of the importance of taking ARV medications at specific times and that missing several doses can lead to treatment failure. A significant number (81.5%) understood the importance of informing healthcare providers about other medications being taken. Finally, 75.6% recognized the need to follow a special diet while on ARV therapy. The mean scores ranged from 0.65 to 0.82, reflecting a high level of knowledge among respondents, with room for improvement in certain areas.

To summarize the level of knowledge of ARV therapy among reproductive aged women attending clinics in selected teaching hospitals in Ekiti State, the SOLO classification was used.

Table 6: Summary of level of knowledge with ARV therapy

Level	Frequency	Percent
Poor Knowledge (1 – 3)	0	0.0
Average Knowledge (4 - 6)	38	31.9
High Knowledge (7 – 10)	81	68.1
Total	119	100.0

Table 6 summarizes the level of knowledge about ARV therapy among 119 respondents. None of the respondents had poor knowledge (scoring 1-3), indicating that all participants had at least an average understanding of ARV therapy. Thirty-eight respondents (31.9%) exhibited average knowledge, scoring between 4 and 6. The majority, 81 respondents (68.1%), demonstrated high knowledge, scoring between 7 and 10. This distribution reflects a generally well-informed population regarding ARV therapy, with a significant proportion possessing a high level of knowledge about the treatment.

Test of Hypothesis

Ho1: There is no significant relationship between the level of knowledge and compliance with ARV therapy among reproductive aged women

Table 7: Pearson Correlation between level of knowledge and compliance with ARV therapy

		Knowledge	Compliance
Knowledge	Pearson Correlation	1	.503**
	Sig. (2-tailed)		.000
	N	119	119
Compliance	Pearson Correlation	.503**	1
	Sig. (2-tailed)	.000	
	N	119	119

** . Correlation is significant at the 0.01 level (2-tailed).

The results in Table 7 revealed a significant relationship between the level of knowledge and compliance with ARV therapy ($r = .503, p = .000$). This implies that the level of knowledge and compliance with ARV therapy is directly related. Therefore, the null hypothesis is rejected. Hence, there was significant relationship between the level of knowledge and compliance with ARV therapy among reproductive aged women.

Discussion

The socio-demographic profile of the 119 respondents reveals a predominantly young and diverse group, with 37.8% aged between 21 and 30 years, followed by 30.3% in the 31 to 40-year range. This distribution reflects a common trend where younger populations are more engaged in surveys related to health and treatment adherence, as seen in similar studies (Addo, 2005). The majority of respondents are Christian (66.4%), aligning with findings from Falnes et al. (2010) which show that religious affiliation can impact attitudes towards health interventions. Marital status reveals that nearly half of the respondents are married, which may influence their health behaviors and access to support systems. Educational attainment shows that a significant portion has secondary education (42.0%), suggesting a moderate level of education that could affect understanding and adherence to ARV therapy, consistent with Avert (2019) which emphasizes the role of education in treatment adherence. Occupation-wise, the most common roles are in private organizations (26.1%) and as students (25.2%), indicating a mix of employment statuses and potential economic impacts on therapy compliance.

The analysis of ARV therapy compliance among 119 respondents reveals a generally positive adherence pattern. None of the respondents fell into the poor compliance category, indicating that all participants maintained at least an average level of adherence to their ARV therapy. Specifically, 42% of the respondents demonstrated average compliance, scoring between 14 and 16, while a majority of 58% exhibited high compliance, with scores ranging from 17 to 20. This distribution highlights a strong overall adherence to ARV therapy, with a notable proportion achieving high compliance, suggesting effective management and support mechanisms in place.

In contrast, the level of compliance with the prevention of mother-to-child transmission (PMTCT) of HIV among mothers attending antenatal clinics at the University College Hospital, Ibadan, presents a mixed picture. While a little over half (52.3%) of the respondents demonstrated high compliance, 47.7% had low compliance. Studies by Peter et al. (2017), Nkwo (2013), and Teshale et al. (2021) emphasize that knowledge about the transmission and prevention of HIV is crucial for reducing non-compliance transmission. Liu et al. (2017), Irshad et al. (2021), and Olopha et al. (2021) further note that increased knowledge empowers individuals to seek effective interventions to prevent HIV transmission.

The findings revealed a strong overall understanding of ARV therapy among the 119 respondents. None of the respondents fell into the category of poor knowledge, demonstrating that all participants had at least an average grasp of ARV therapy. A notable 68.1% of respondents exhibited high knowledge, which aligns with other studies emphasizing the importance of adequate knowledge for effective ARV adherence. For instance, Liu et al. (2017) highlighted that increased knowledge about HIV treatment could encourage better adherence and proactive health-seeking behaviors. This is consistent with the current study's results, suggesting that a well-informed population is more likely to adhere to ARV therapy. Conversely, the finding by Boateng et al. (2013) contrasts with the current results, as their study showed that a significant percentage of participants had inadequate knowledge about ART, leading to higher rates of non-adherence. Similarly, Falnes et al. (2010), Bano et al. (2017), Irshad et al. (2021), and Olopha et al. (2021) found that inadequate knowledge about ARV therapy often resulted in poor adherence. The current study's high level of knowledge among respondents indicates a positive outlook on adherence, reinforcing the idea that comprehensive education on ARV therapy is crucial for maintaining effective treatment.

The findings also revealed a significant positive relationship between the level of knowledge about ARV therapy and adherence to the medication regimen, with a correlation coefficient of ($r = .503, p = .000$). This indicates that as knowledge about ARV therapy increases, so does the level of compliance. This result is consistent with previous research that highlights the critical role of knowledge in influencing ARV therapy adherence. For instance, Avert (2019) and Olopha et al. (2021) have documented similar findings, emphasizing that a comprehensive understanding of HIV, ARV therapy, and its associated practices significantly impacts the motivation and adherence to ARV regimens.

Implication(s) of findings to Nursing

The implications of these findings for nursing practice are substantial, particularly in enhancing patient education and support systems to improve ARV therapy adherence. The positive correlation between knowledge and adherence underscores the importance of nurses as educators in healthcare settings. Nurses play a pivotal role in providing comprehensive education on ARV therapy, ensuring patients understand the importance of adherence, the functioning of the medication, and the potential consequences of non-compliance.

The study reveals that a younger demographic is more engaged, which suggests that nursing strategies should be tailored to this group's learning styles and communication preferences. Nurses should employ age-appropriate educational tools, including digital resources and interactive sessions, to maintain high levels of engagement and knowledge retention among younger patients.

Additionally, the high level of compliance observed among the respondents indicates effective support mechanisms in place, which could include regular follow-up appointments, counseling services, and peer support groups. Nurses are central to these initiatives, as they often act as the first point of contact for patients needing guidance or assistance with their treatment plans. Ensuring that nurses are well-equipped to provide ongoing support can help sustain high compliance rates.

The findings also highlight the importance of addressing socio-demographic factors, such as marital status and occupation, in nursing care plans. For instance, married individuals may benefit from family counseling sessions that include their spouses, thereby strengthening the support system and promoting adherence. Understanding the economic challenges faced by patients, particularly those in less stable employment, allows nurses to advocate for resources

or financial assistance programs that could alleviate some of the barriers to consistent ARV therapy adherence.

Conclusion

The study concludes that compliance with ARV therapy among the respondents is generally high, with a notable proportion demonstrating a strong adherence to their medication regimen. The respondents generally possess a high level of knowledge about ARV therapy, which positively correlates with their compliance.

Recommmendations

Based on the findings of this study, the following recommendations were made;

1. Health authorities and community organizations should implement programs to strengthen social support networks for individuals on ARV therapy, including family and community-based support initiatives.
2. Government agencies and non-governmental organizations (NGOs) should develop and expand economic support programs, such as financial aid for transportation and medication costs, to alleviate economic barriers to adherence.
3. Healthcare providers and public health educators should continue educational efforts to increase awareness and understanding of ARV therapy, emphasizing its effectiveness and the importance of consistent adherence.
4. Healthcare professionals should provide targeted interventions to address cultural misconceptions and promote positive attitudes towards ARV therapy within communities.
5. Health authorities and program administrators should regularly assess and refine social and economic support programs to ensure they effectively contribute to improved compliance with ARV therapy.

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